

CLAIMS

1. A feed device for a motor vehicle having a surge chamber which is provided for arrangement in a fuel tank, having a filling device for the surge chamber, having a sucking jet pump which is arranged outside the surge chamber and is intended for feeding fuel via a feed line into the surge chamber or into an intermediate tank connected to the surge chamber, and having a section of the feed line which is guided vertically downward into the intermediate tank or the surge chamber, characterized in that a ventilation element (10) is arranged in the region of the highest point of the feed line (7), and in that the ventilation element (10) is designed to release an opening (11) if the flow of fuel fails.
- 5 2. The feed device as claimed in claim 1, characterized in that the ventilation element (10) has a closing body (12, 16, 18) which can be moved by the pressure of the fuel in the feed line (7), and, in a first position, covers the opening (11) in the feed line (7) and, in a second position, releases the opening (11).
- 10 3. The feed device as claimed in claim 1 or 2, characterized in that the closing body (12) has a bolt (13) penetrating a wall of the feed line (7), and in that the bolt (13) has, at its free end, a widened section (14) which, in the first position, is at a distance from the wall of the feed line (7).
- 15 4. The feed device as claimed in claim 1 or 2, characterized in that the closing bodies (16) are connected to a wall of the feed line (7) via a gastight hinge (17).
- 20 5. The feed device as claimed in claim 1 or 2, characterized in that the ventilation element (10) has a float (15) closing the opening (11) in the wall of the feed line (7).
- 25 6. The feed device as claimed in claim 2, characterized in that the closing body (12, 16) is designed as a stiff wall element.

7. The feed device as claimed in claim 2, characterized in that the closing body (18) is designed as an elastic membrane.
8. The feed device as claimed in claim 1, characterized in that the ventilation element (10) has an upwardly open pipe (19), and in that the pipe (19) is longer than a column of fuel which can be produced by the pressure of the sucking jet pump (6) when the fuel tank (1) is virtually empty, and/or in that the opening (11) is designed as a throttling opening.
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